31638. Dioscorea sp.

From Chile. Received through Mr. José D. Husbands, Limavida, via Molina, Chile, August 15, 1911.

"Haiauque. A dainty vine elegant for window or table decoration. Tubers edible when cooked." (Husbands.)

31639. Rhus verniciflua Stokes.

Lacquer tree.

The lacquer tree has heretofore been listed in these inventories as Rhus vernicifera, which was published in 1825 by De Candolle (Prodromus, vol. 2, p. 68). In 1796, however, Salisbury (Prodromus, p. 169) published the name Rhus verniciferum, based on Rhus vernix L., thus invalidating the use of the same name by De Candolle. Rhus vernix, published in 1753 by Linnæus (Species Plantarum, p. 265) included two distinct species, the poison sumac of America and the lacquer tree of Japan. In 1771, Linnæus (Mantissa Plantarum, p. 358) excluded the Japanese plant from R. vernix, thus showing that he wished the name to apply to the American plant. As no other name had been published for either of these plants up to this time there is no reason why this should not be followed. In 1812, Stokes (A Botanical Materia Medica, vol. 2, p. 164) called attention to this fact in a note under his description of Rhus verniciflua, which is apparently the earliest name published for the lacquer tree, and is the one here used.

From Japan. Presented by Mr. Thomas Sammons, American consul general, Yokohama, Japan, who procured them from Mr. Metsunosuke Yamaguchi, Shindamachi, Nagano, Nagano Prefecture, Japan. Received July 26, 1911.

"A slender-branched tree with winged leaves, attaining a height of 20 feet. It is common throughout Japan and is cultivated for its sap, which flows from its stem and branches on being wounded. It is first cream colored, but on exposure to the air soon turns black, and is the varnish which the Japanese use for lacquering their furniture or ornamental articles." (Smith, Dictionary of Populår Names of Economic Plants, p. 426.)

"The varnish or lacquer is valuable because of its great hardness without brittleness or becoming cracked, its high lustre and mirrorlike surface, which remains untarnished for centuries, its resistance to the agencies which attack resinous varnishes, as it is not injured by boiling water, hot ashes, hot alcoholic liquors, acids, etc." (J. J. Rein, Industries of Japan.)

"Unlike ordinary paints, which dry because of oxidizing properties of the oil in them, this Japanese lacquer dries better in moist than in dry air, as the result of a supposed enzyme which acts upon an albuminoid in the presence of a vegetable-acid and a gum.

"Experiments have shown that lacquer will not harden if subjected to temperatures which are high enough to coagulate the albumen. From a painful personal experience with some of the imported juice of this tree I can warn anyone not to experiment with it unless he is immune to ivy poisoning. Here would seem to be an opportunity to discover means by which with the use of proper face and hand lotions workers could handle the lacquer with impunity. Certainly, so wonderful a thing as this lacquer industry should not go without investigation because of its poisonous properties." (Fairchild.)

Experimenters with this tree should remember that the volatile sap causes a painful eruption on the skin of certain persons similar to that caused by the species of our common Rhus known as poison ivy, though probably more intense even than the latter.

Distribution.—On the wooded slopes of the mountains in the islands of Japan and in the provinces of Ichang, Shensi, and Szechwan in China.